Stay Involved

For more information about SMART Corridors, visit **www.smartcorridors.net** or contact **Cyrus Minoofar** at ACCMA.

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Spotlight

East Bay SMART Corridors Program receives international recognition.

In November of 2003, the SMART Corridors Program will be featured at the ITS World Congress 2003 in Madrid, Spain, where Program Manager, Cyrus Minoofar, has been asked to present two papers on the Program. For copies of the papers, please visit the SMART Corridors Web site.

Did You Know... Experience in U.S. cities and abroad show ITS can improve bus travel time by up to 20%.

— FHWA Intelligent Transportation Systems Benefits and Costs 2003 Update

SMART Corridors Gets a Program Identity

Watch for Our New Look!

East Bay SMART Corridors Program

Program Partners

The East Bay SMART Corridors Program is a cooperative effort between the following agencies:

Alameda County Congestion Management Agency (ACCMA) ▪ Contra Costa Transportation Authority (CCTA) ▪ West Contra Costa Transportation Advisory Committee (WCCTAC) ▪ Metropolitan Transportation Commission (MTC) ▪ Federal Highway Administration (FHWA) ▪ Federal Transit Administration (FTA) ▪ California Department of Transportation (Caltrans) ▪ California Highway Patrol (CHP) ▪ AC Transit ▪ Western Contra Costa Transit Authority (WestCAT) ▪ Union City Transit ▪ Alameda County ▪ Contra Costa County ▪ City of Albany ▪ City of Berkeley ▪ City of El Cerrito ▪ City of Emeryville ▪ City of Hayward ▪ City of Hercules ▪ City of Pinole ▪ City of Richmond ▪ City of Oakland ▪ City of San Leandro ▪ City of San Pablo ▪ City of Union City

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Dennis R. Fay, Executive Director

East Bay SMART Corridors Update

Fall 2003, Volume I, Issue 1

ACCMA Teams Up with 24 Agencies to Manage Traffic in the East Bay

Institutional Barriers Replaced with Trust

In 1995, to better manage the traffic along the East Bay's San Pablo and I-880 Corridors, the Alameda County Congestion Management Agency (ACCMA) took on a leadership role spearheading a cooperative effort of 24 agencies. Recognizing the importance of rejuvenating the area to prevent exodus and attract new investment, ACCMA began planning a multimodal, integrated transportation management system reaching 38-miles north to south from the City of Hercules in Contra Costa County to Union City in Alameda County. This program is known today as the East Bay SMART Corridors (SMART Corridors).

The goal of SMART is to improve transportation safety, mobility and efficiency while providing real-time information to agencies and the public — **a goal that is close to becoming a reality.**

The SMART Corridors program is the product of extensive coordination. To develop the program, ACCMA had to find an effective and efficient way to incorporate the critical input of 24 agencies. Partnering with the Contra Costa County Transportation Authority and the West Contra Costa Transportation Advisory Committee, ACCMA invited fire, police and public works department representatives from 15 communities to participate in a Technical Advisory Committee (TAC). Local, state and federal transportation agencies such as AC Transit, the Metropolitan Transportation Commission, CA Department of Transportation (Caltrans), Federal Transit Administration and the Federal Highway Administration are also participants. ACCMA helped identify program benefits for each participating agency while promoting cost sharing. Monthly meetings are held to facilitate open communication and to build consensus. Each agency is actively involved. **Equity is a priority.**

Two Memorandums of Understanding (MOUs) providing the general vision and intent that each organization will work together were approved by agencies along each corridor. The MOUs evolved into binding agreements between ACCMA and each participating party that allow the agency to do work on the others' behalf. **These partnerships are crucial to the program's success.**

Agreeing that the Operation and Management (O&M) of the corridors should be an integrated effort, the TAC has four subcommittees to address:

- incident management,
- maintenance,
- operations, and
- transit and traveler issues.

Subcommittee results will be used to finalize the O&M manual (currently in draft form), ensuring the sustainabile function of SMART Corridors.

Using collaboration and consensus building to mold a strong alliance, ACCMA has eliminated institutional barriers and formed partnerships that are the basis of SMART Corridors. The East Bay SMART Corridors Program is a model for other jurisdictions throughout the world interested in developing integrated transportation management solutions.

Benefits

Why Is the SMART Corridors Program so *smart*?

SMART improves transportation safety

- Supports emergency response
- Aids quick incident removal
- Reduces traffic delays
- Improves traffic flow

SMART increases regional mobility

- Helps buses stay on schedule
- Supports a multimodal transportation system
- Reduces travel time
- Shares information between 24 agencies and cities

SMART uses innovative technology

- Manages signals to react to traffic conditions
- Makes real-time roadway information available to the public

Constructing an Intelligent Transportation System

Maximizing the Value of Scarce Dollars

Although you have not seen any construction activities, construction of SMART Corridors kicked off January 2003. Intelligent Transportation System (ITS) tools are being placed along 38-miles of roadway without causing impacts, congestion or detouring. Even in areas where it is necessary to construct underneath city streets, special techniques are being used to minimize traffic impacts.

Getting More for Your Dollars

While a substantial investment in ITS related equipment is required, the costs are only a fraction of the expense of widening or building a new street. Adding an additional lane in each direction to an arterial road costs millions of dollars. If it is necessary to purchase property to complete a project, costs further increase. If the project impacts any historical or cultural resources or is shown to increase noise or air pollution, mitigation measures become necessary, once again escalating costs. ITS costs are kept low by utilizing existing infrastructure. Once ITS infrastructure is in place, costs to expand or adjust the system will be minimal.

Construction of the SMART Corridors will take only one year (scheduled to be complete November 2003), has little if any environmental impacts and requires no right-of-way acquisitions. Program benefits to the public and agencies will be quickly received. With $15 million in funding, ACCMA planned, designed and is constructing SMART Corridors. The multimodal nature and agency cooperation of the ITS program makes it appealing to a wide variety of federal, state, regional and local funding sources including: Caltrans, the Bay Area Air Quality Management District and AC Transit.

Of $15 million in funding to plan, design and construct SMART Corridors, $1.8 million is earmarked for O&M. This ensures that training, monitoring and maintenance occur, sustaining effective operations.

Reducing Traffic Delays During Construction

To minimize traffic impacts during construction of the SMART system, a technique called Directional Boring is used. Directional Boring allows construction crews to drill a horizontal tunnel underneath a city street from a hole in the sidewalk. "Conduit" or protective tubes holding electric wires and cables are then pushed through the tunnels. Directional Boring eliminates the need to reroute vehicles around construction areas, minimizing disruption to residential communities.

Did You Know... 40 – 60% of traffic delays in urban areas are caused by incidents (disabled vehicles, accidents, etc.)*. ITS tools enhance emergency service reaction time, adding precious seconds to help to save lives.

**2001 Urban Mobility Report, Texas Transportation Institute*

Schedule

Phase I Strategic Plan Development	Complete
Phase II Design and Preparation of Plans	Complete
Phase III Construction	Completion Scheduled for November 2003
Phase IV Operation & Management	From 2004 and on

What People Are Saying about SMART Corridors

"East Bay SMART Corridor's coordination efforts and traffic signal and transit priority technology investments, make Rapid Bus service possible along the 14-mile San Pablo Avenue Corridor. AC Transit has cut scheduled passenger travel time on the 72R San Pablo Rapid by 20%, and is anticipating significant ridership increases because of this. Initial portions of the project have been implemented, with all components of the Rapid service due on line early this fall, making AC Transit the second major transit agency in California to successfully implement Rapid Bus service."

— Jon Twichell, *Transportation Planning Manager, AC Transit*

"Language in the San Pablo and I-880 SMART Corridors MOUs calls for an integrated approach to operating and maintaining the ITS system. Cyrus Minoofar, Program Manager, called upon the technical experts of various jurisdictions to help draft the O&M Manual. Working in different subcommittees, members evaluated and determined program standards, which were then presented to the TAC, creating 'agreed upon' protocols that will ensure an efficient ITS system accessible to all participants."

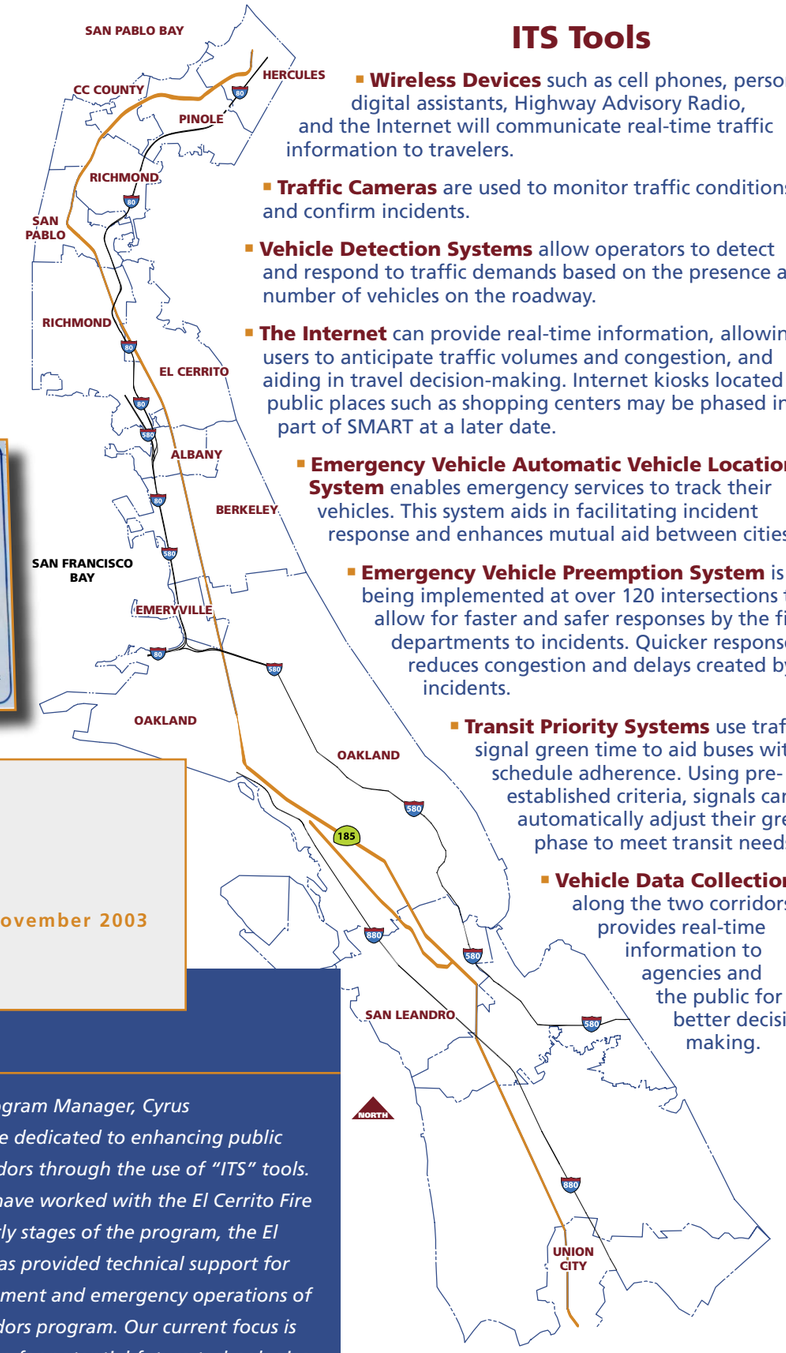
— Amit Kothari, P.E., *Transportation Services Manager, City of Oakland*

"WestCAT's participation in the East Bay SMART Corridors process has opened opportunities to implement Intelligent Transportation Systems Technology in the WestCAT system. When implemented, this innovative program will dramatically improve schedule adherence and route management. By combining agency resources and obtaining financial and technical support through the SMART Corridors Program, WestCAT and other local agencies in both Alameda and Contra Costa Counties are now able to take a step forward to control congestion along heavily used arterials."

— Aleida Andrino Chavez, *Transit Planner, Western Contra Costa Transit Authority*

"The SMART Corridors Program Manager, Cyrus Minoofar, and his team are dedicated to enhancing public safety in the SMART Corridors through the use of "ITS" tools. To achieve this goal they have worked with the El Cerrito Fire Department. From the early stages of the program, the El Cerrito Fire Department has provided technical support for both the incident management and emergency operations of the East Bay SMART Corridors program. Our current focus is on researching information for potential future technologies and implementation requirements that will expand incident management capabilities and further enhance public safety. In a line of work where minutes count, SMART Corridors make a difference."

— Mike Bond, *Fire Captain & Emergency Preparedness Coordinator, City of El Cerrito*



ITS Tools

- **Wireless Devices** such as cell phones, personal digital assistants, Highway Advisory Radio, and the Internet will communicate real-time traffic information to travelers.
- **Traffic Cameras** are used to monitor traffic conditions and confirm incidents.
- **Vehicle Detection Systems** allow operators to detect and respond to traffic demands based on the presence and number of vehicles on the roadway.
- **The Internet** can provide real-time information, allowing users to anticipate traffic volumes and congestion, and aiding in travel decision-making. Internet kiosks located in public places such as shopping centers may be phased in as part of SMART at a later date.
- **Emergency Vehicle Automatic Vehicle Location System** enables emergency services to track their vehicles. This system aids in facilitating incident response and enhances mutual aid between cities.
- **Emergency Vehicle Preemption System** is being implemented at over 120 intersections to allow for faster and safer responses by the fire departments to incidents. Quicker response reduces congestion and delays created by incidents.
- **Transit Priority Systems** use traffic signal green time to aid buses with schedule adherence. Using pre-established criteria, signals can automatically adjust their green phase to meet transit needs.
- **Vehicle Data Collection** along the two corridors provides real-time information to agencies and the public for better decision making.

Program Area Map